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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,859	05/02/2001	Brian Kilgore	2479.1013-000	9186

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EXAMINER

LUTHER, WILLIAM A

ART UNIT	PAPER NUMBER
2664	5

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/847,859

Applicant(s)

KILGORE, BRIAN

Examiner

William A. Luther

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-18 and 22-27 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 19-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 10-11, 13-15, 17-18, 23-24, and 27 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Pat. No. 6,512,751 to Struhsaker et al ('751).

Considering claims 1, 13, and 27, '751 appears to teach a method for transmitting A/V data signals in a wireless network (abstract), receiving a stream of A/V data signals each of the data signals corresponding to a particular symbol (each protocol, identified in the '751 abstract, is transmit using symbols that represent one or more bits), interleaving the symbols in one of the frames/FEC blocks with symbols in the an adjacent one of frames/FEC blocks in the series of frames/FEC blocks ('751 appears to teach interleaving symbols between frames including but not limited to adjacent frames). Column 13 line 14 through column 14 line 20.

Considering claim 2-3, and 14-15, '751 teaches de-interleaving its interleaved symbols. Column 13 line 48. Considering claim 3, de-interleaving is implicitly designed to accomplishes restoration of the original signal.

Considering claims 4-5, 11, 17-18, and 24, '751 appears to teach interleaving using a predetermined number of symbols. Col. 13. Further, the '751 spreading computation appears to

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be predetermined ("... the 72 bit field is interleaved to spread a single burst errors across all three FEC blocks ...")

Considering claims 10 and 23, '751 appears to teach compression. Col. 7 line 37.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 12, 16, 22, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over '751.

Considering claims 9 and 22, '751 teaches various aspects of the claims (see above).

Further, the use of a vocoder is ubiquitous in the modulation schemes identified in '751's abstract. Official notice is taken. In any event, the protocol identified by the applicant on page 1 of the instant application's specification is IS-95 that requires vocoders. It would have been obvious to the ordinary artisan to use a vocoder as the means to convert sampled voice into symbols that represent that voice for the benefit of compliance with established and future planned industry standards.

Considering claims 12 and 16, although '751 may not explicitly teach recreating portions of frames/blocks, '751 teaches de-interleaving. '751 does not appear to mention discarding

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portions of frames/blocks when the preceding frames/blocks are corrupted. Accordingly, it would appear to be obvious to utilize all data not lost for the purpose of a more efficient system.

Considering claims 25-26, '751 appears to teach frame/block interleaving (see rejections under section 102 above). Further, '751 appears to suggest that is accomplished by using software which digital manipulates transmitted and received signals. Col. 13. To the extent that '751 does not suggest that, it would have been obvious to the ordinary artisan for the benefit of minimizing the cost of hardware.

5. Claim 6-8 and 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

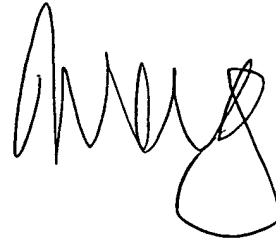
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. '635 teaches interleaving and reorganizing control data. Figure 3. '387 teaches the forward error correction in a real-time video environment. Abstract. '477 mentions that interleaves are also used to obtain a quality of service environment by interleaving (or shuffling) coded speech frames over a number of packets. Column 6 lines 9-17.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Luther whose telephone number is (703) 308-6609.

William Luther  
Primary Examiner

A handwritten signature in black ink, appearing to read 'W. Luther', with a large, stylized loop at the end.